APPENDIX J

Traditional Cultural Practices and Resources Assessment

Traditional Cultural Practices and Resources Assessment

The following discussion was compiled from existing literature (including online resources), videos and information provided by community members interviewed during preparation of the EA.

Project Area

The project area is offshore of the district of Wai'anae, leeward O'ahu. The district of Wai'anae consists of nine ahupua'a, including Nānākuli, Lualualei, Wai'anae, Mākaha, Kea'au, 'Ōhikilolo, Mākua, Kahanahāiki, and Keawa'ula. A literature review of cultural impact assessments previously conducted for projects located along the Wai'anae coast have revealed no offshore historic, cultural or archaeological resources within the project area. However, there are several other land-based or near-shore sites of significance within the ahupua'a that comprise the Wai'anae district.

The word "Wai'anae" has been interpreted to mean "mullet water" and has been associated with a large fresh water fishpond located within the district, known as Puehu, which was used for mullet harvesting by native Hawaiians (Handy and Handy, 1972). Historically, nearshore fisheries and marine resources have been an important resource to native Hawaiians for subsistence and recreation. The Puehu fishpond, located within Pōka'ī Bay, off the Wai'anae ahupua'a, was reported to have been almost completely filled by 1954 (CSH, 2009a).

Historical Context

Pōka'ī Bay has been the nexus of activity for the Wai'anae Coast since pre-contact days and continues to be the focus of life in Wai'anae to this day. The bay is also important to an understanding of the cultural history of the area. At a distance of approximately .5 to 1.5 miles from the shore, the offshore project work areas are within relatively close proximity to Pōka'ī Bay. The bay is the closest land to the subject work areas defined by the proposed action.

The bay is named for Chief Pōka'ī who arrived in Hawai'i 400 to 500 years ago. Pōka'ī is famous for bringing the cornerstones for Ku'ilioloa Heiau and the first coconut trees in Hawai'i. These coconut trees soon grew into a famous grove with the best coconuts on the Wai'anae Coast. Prior to contact with the western world the bay was the site of a famous fishing village with double-hulled canoes like the Hokuleia transporting in and out of the bay (*Hawai'i Stories*, n.d.)

The offshore work areas do not hold any particular cultural significance. However, there are a number of archaeological sites onshore in the Wai'anae District that have cultural significance to Hawaiians. One in particular has a definite tie to the ocean and is relatively close to the project areas. It is the Ku'ilioloa heiau sited on a small peninsula known as Kaneilio Point which juts out into Pōka'ī Bay. The edge of this peninsula is about .5 miles from the closest points of Work Areas A and B.

A metal plaque at the entrance to the heiau indicates that the original name for Pōka'ī Bay was "Malaea" which means calm or serene. The plaque also states that, "At the north end of the bay is Kaupuni Stream, the spawning ground of anae (mullet) which gave Wai'anae (mullet waters)

its name. The village Pōkaʻī, famous for its coconut grove once lay near the stream." The following description of the Kuʻilioloa Heiau was provided by *Kuʻilioloa Heiau and Kanaloa* (http://www.bluecoast.org/nonprofit/kanaloa/k25.html).

The names related to this heiau and place incorporate some of the major gods of the ancient Hawaiians. The name of the heiau, Kuʻilioloa incorporates the god of war, Kū. The name of the point on which the heiau is built, Kaneʻilio incorporates another of Hawaii's major gods, Kane. One of the major functions of this heiau was the teaching of celestial navigation, which incorporates the realm of the god Lono through the clouds and the heavens clearly visible from this ideally situated site. Kuʻilioloa heiau is the domain of the god Kanaloa. In 1819 the kapu system was overthrown. But because Wai'anae was one of the last places to accept Christianity, Kuʻilioloa was one of the few heiau where the Hawaiian community could still practice their ancient customs such as sacrifices, the teaching of celestial navigation and fishing, healing and investitures. Before WWII started, due to its strategic location, the U.S. military built a bunker on Kuʻilioloa, destroying the original walls and terraces. The Wai'anae community has since rebuilt the heiau.

From the edge of Kane'ilio Peninsula one is able to see, in both directions, the entire Wai'anae Coast from Lahilahi Point to Maili Point, with countless ridgetops of the Wai'anae Mountains visible from this coastal location (Hardwick, 2009). The site is connected with distant travelers by the figure of Pōka'ī, The Navigator. Famous in legend and song, Pōka'ī was a voyaging chief of Kahiki (Tahiti) who is said to have brought the valuable and useful coconut palm to Hawai'i. A huge grove of coconuts once lined the back shore of Pōka'ī Bay. The trees provided shelter and useful materials for the ancient Hawaiian village. This grove, known as "Ka Uluniu o Pokai," was not just a legend as it was noted by western sailors in the 1700s. A few examples of these stately trees can still be seen clustered around the entrance to the heiau (Hardwick, 2009).

Due to its advantageous location, one of the primary functions of this heiau was probably as a lookout and navigation heiau. From here specialists in astronomy could study the stars and celestial features. Possibly predicting seasons and events, most certainly learning the star maps that would guide them across the seemingly featureless oceans (Hardwick, 2009).

One of the modern manifestations of this seafaring cultural legacy is the building of the voyaging canoe E Ala. This undertaking was the inspiration of the Wai'anae Hawaiian Civic Club. The idea was first conceived in 1978 and the actual construction of the canoe was begun in 1981. The citizens of Wai'anae worked many hours learning how to shape, bend and join wood into its ocean-going form. The project allowed community leaders to guide the opio (children) in an intensive examination of their legends, archaeological remains and oral history of their kupuna to learn about the seafaring ways of their ancestors. For over a decade the E Ala, which means the awakening, was leased to the Polynesian Voyaging Society. The E Ala is not large enough to make trans-oceanic voyages like the Hokuleia, but is suitable for inter-island travel (*The Return of E Ala to the Wai'anae Coast*).

Swimming, diving, fishing, canoeing, and food gathering, etc., were practiced in Waianae's waters by pre-contact Hawaiians, and continues to be practiced by contemporary residents of the

district. After the defeat of the army of Oahu's King Kalanikupule by Kamehameha the Great at Nu'uanu in 1795, many of the defeated O'ahu warriors fled to Wai'anae. The area was isolated, hot, and had little water. Therefore, Wai'anae was not considered desirable by the conquering armies from the island of Hawai'i. But the sea off the coast of Wai'anae contained an abundant supply of fish and other seafood, and the early settlers were able to live off the resources of the ocean and thrive in this area. (Sterling and Summers, 1978)

The following post-contact history was gathered from the video *Hawai'i Stories Presents Pōka'ī Bay*, in which Mr. William Aila, long-time harbormaster at the Wai'anae Small Boat Harbor, recounts the stories of Pōka'ī Bay and its surrounding environs.

In 1793 Captain Vancouver was the first white man to stop at Pōka'ī Bay. The Hawaiian chief was under kapu that day, so the natives asked Vancouver to wait until the next day when their chief would be available to share food with him. Vancouver looked at the desolate landscape and decided not to wait. He sailed away not having seen canoes on the beaches, fish drying on the shore, and hundreds of acres of taro growing in the lush green lo'i in the back valleys of the Wai'anae Mountains. Food was abundant and the fact that there were three heiau in the area attested to the large population that once thrived here.

After Vancouver left, some sailors who passed through noticed the fragrant wood growing in the forests at the base of the Wai'anae Mountains. Those who had been to China recognized this as sandlewood, a highly prized commodity that was used for incense and furniture. For about twenty years sandlewood became the driving force of the Hawaiian economy until the supply was completely depleted. One story about King Kamehameha the Great is that he commissioned the equivalent of two boatloads of sandlewood from the forests of Wai'anae to pay for two modern ships he had purchased from westerners. This speaks to the health of the forests and the large workforce that it must have taken to accomplish such a feat in pre-machinery Hawai'i, as everything was done by hand.

About 1880 Herman Wedemeyer started the first sugar plantation and sugar replaced sandlewood as the chief commodity produced in Wai'anae. Sugar production lasted in Wai'anae from the 1880s until about the 1940s.

From 1890 until the early 1900s a two-story hotel built by John Dowsett (son-in law of plantation boss Herman Wedemeyer) was located in the area where the Wai'anae lifeguard substation now stands. The hotel became a gathering place and provided a place to stay for people who came out on the newly built Dillingham railway that went around the island.

With the bombing of Pearl Harbor and the outbreak of World War II, the beaches of Wai'anae were used to practice amphibious landings. Prior to installation of the breakwater in the 1950s the beach at Pōka'ī Bay was like all other beaches in Wai'anae. The sand receded in the winter and was washed back onto the beach in the summer.

The breakwater was constructed to protect the beach and create the harbor. This resulted in a large accretion of sand in the bay.

There was also a pier that the military put in called "the iron pier." In the 1960s it was deemed unsafe and removed. A mooring field for fishing boats began to grow from the end of the war in 1946 and Hawaiian and Japanese fisherman once again were able to make a living from the ocean. During the war fishing had been banned for the Japanese.

Kaupuni stream, which is located just north of Pōka'ī Bay, used to go all the way back to the base of the mountain, Kamaili'unu, and meet up with the large marsh that was there. The marsh was the result of Kamaili Springs meeting the ocean water. One of the reasons that Wai'anae got its name was for the large mullet that used to be caught at the base of the mountain. The older generation used to say, "When the ducks flew the sky would darken, that's how many birds there were [in the marsh]." Unfortunately the City, before environmental laws, filled in the marsh and made it a rubbish dump.

Chants and Legends

Although there are no physical cultural resources in the offshore work areas, the cultural legacy of ancient Hawaiians lives on in legends and chants. Two of note, are the Kumulipo and the legends of Maui the demigod. They make reference to Wai'anae and to the ocean. (pers. comm. Aldeguer) The Kumulipo is the Hawaiian creation chant translated into English by Queen Lili'uokalani while she was under house arrest at 'Iolani Palace in 1897. The chant was compiled by one of the Queen's 18th century ancestors, Keaulumoku. The Kumulipo starts with the emergence of sea creatures, then moves on to insects, land plants, animals and eventually human beings. The chant describes the complex interrelationships between various plants and animals. Most of the chant is a massive genealogy, which lists thousands of ancestors of the Hawaiian royal family.

Some of the legends about the demigod Maui concern the ocean and fishing. Maui is said to have been born in Wai'anae. Maui was known as "the trickster." He was extremely clever but was not as skilled a fisherman as his brothers. He managed to increase his catch by stealing his brothers' fish. When his brothers caught on to this they refused to let Maui fish with them. Maui was very distressed by this rejection so his mother sent him to his father to obtain a magical fish hook known as Manaiakalani. Maui was curious why the Hawaiian Islands were separated and decided to try to join them. So once again he convinced his brothers to let him fish with them. He dropped Manaiakalani into the water and told his brothers to paddle as hard as they could in the opposite direction and not to look back. Finally, they became exhausted and looked back to see the chain of islands being pulled behind them. But as soon as they stopped paddling the magic hook was loosened and the islands separated and drifted back to their original locations. Maui was upset because they didn't reach shore and the islands remained unconnected (Sterling and Summers, 1978). Many of the ancient legends are reflected in the Wai'anae Mountains and other geographic elements. The Maui Pōhaku—where Maui "reposed and sunned himself"—is located along Farrington Highway in Lualualei (CSH 2009a).

Cultural Practices

Historically, Wai'anae was known for its abundant fishing grounds, particularly for deep sea fishing opportunities to the northwest, off Kaena (CSH, 2009b). In the 1950s fisherman didn't need to go more than two miles off shore because there was so much fish in the ocean. Their boats would be full of fish and they would have to turn around and come home. They never went past Black Rock or Mauna Lahilahi, they never went past Maili Point or Pu'u Ahuluhulu. Now they have to go 40 to 50 miles out before they can find enough fish. The reduced abundance is generally attributed to overfishing on an industrial scale. One tuna purse seiner can carry 200 metric tons of tuna in one trip. That's equivalent to the catch of all of the little boats and the long-liners in Hawai'i in one year (*Hawai'i Stories*, n.d.).

Oral accounts of community members tell of a time when marine and coastal resources were still plentiful. Resources included varieties of limu (limu kohu, limu kala, limu pe'e pe'e, and wāwae'iole), fish and other marine life, shells, and coral. While many of these resources are still available in the area's nearshore waters, the supply has been reduced. There is much less fishing and gathering done today than 50 years ago. Because of the reduced supply, most fishing and gathering practiced today is for recreational purposes and not as a means of earning a living (per. comm. G. Grace). Community members attribute this depletion to physical alterations to the coastal areas, such as breakwaters and channelized streams; the capping and diverting of upland streams; the replacement of a large sewer culvert on the Ma'ili side of Pōka'ī Bay; and overharvesting of resources, beyond what is needed for subsistence (CSH, 2009b; pers. comm. A. Greenwood).

Another traditional use of the bay practiced by ancient Hawaiians was the harvesting of sea salt in the tidal pools that surrounded Kuʻulioloa heiau (prior to the construction of the breakwater walls). In the winter the ocean spray would collect in the tidal pools and after a while the liquid would dry leaving a layer of sea salt that could be harvested and used for cooking. Today you would not be able to do this even if there were no breakwater walls because the water is not as clean as it used to be. At one time, there was also a salt pond located at Keaulana beach, where salt collection was practiced (CSH, 2009b).

Today, Pōka'ī Bay has protected status. As a result, the fish are coming back to the bay. There are now large schools of akule and weke, and turtles, and even manta rays have been seen feeding on plankton. Recently it has been noticed that mohee (squid) are coming back to Wai'anae waters in small numbers. They have been seen at the Wai'anae Boat Harbor, Mākaha surfing beach and Kahe Point power plant. With the banning of the drift gill net fleets it appears that the mohee are making a real comeback.

Along the Wai'anae coast, traditional cultural practices that continue to be observed today include fishing, net laying, spear fishing/diving, gathering of limu and other marine life (e.g., pīpīpī, 'opihi, wana), surfing, swimming, canoe paddling, diving, and honoring kupuna that have been laid to rest at sea.

Cultural Significance

Many marine animals are mentioned in ancient Hawaiian legends and chants. As well, various marine plants and animals do have cultural significance to native Hawaiians. Some are

mentioned in traditional oli and mele, such as the lengthy creation chant, the Kumulipo. Some plants and animals have ceremonial meaning for religious purposes. For example, Limu kala is used in hoʻoponopono and in purification ceremonies after the death of a relative (pers. comm. W. Aila; Hawaiʻi Natural History Foundation, 2001). Varieties of fish and other marine life are featured in legends and used as offerings and for other ceremonial purposes. Raw he'e (octopus) is a standard food item at luau and is the Kinolau (physical form) of the Hawaiian God, Kanaloa (pers. comm. W. Aila). Traditionally, the best foods were offered to the gods. Red and white fish were common religious offerings. Common red fish were weke-'ula, moano, or kūmū; white fish were ahole, 'ama'ama, or a light-colored weke (Titcomb, 1972).

Also, many families have personal deities in animal form, known as 'aumakua. 'Aumakua are spirits that that are embodied in physical form by a plant or animal. Manō (shark), honu (turtle) and he'e (octopus) are common marine species that are often family 'aumakua. Terrestrial animals such as lizards, owls and bats are also 'aumakua. Family members have a symbiotic relationship with their 'aumakua. They do not harm or eat them and the 'aumakua in turn warn and reprimand mortals in dreams and visions (Pukui and Elbert, 1986).

Potential Impacts

According to community members that were interviewed during preparation of this EA, the offshore work areas do not hold any particular cultural significance to native Hawaiians. Most activities such as fishing, diving, canoeing and gathering of limu take place closer to the shore. Interviewees also said that they did not know of the presence of any significant cultural resources in any of the offshore work area, adding that the cultural legacy lives on in legends and chants. While the demonstration project might pose a temporary inconvenience to cultural and recreational activities, specifically fishing, interviewees did not believe that the demonstration project would have any long-term negative impacts on cultural resources or practices in the Wai'anae region.

The following community members were interviewed to gather information relating to potential impacts to cultural resources and practices that could result from implementing the Proposed Action.

Mr. William Aila – Mr. Aila served for many years as the Harbor Master at the Wai'anae Boat Harbor. He has recently been named to head the Department of Land and Natural Resources. Mr. Aila was raised in Wai'anae and is an avid fisher and diver. He has over 20 years of experience as a commercial net fisherman and diver gathering marine resources for Native Hawaiian cultural and religious purposes. He, as well as past generations of his family, have fished the waters from Puuloa to Wai'anae. Mr. Aila is active in the Wai'anae community, holding past positions on the Wai'anae Coast Neighborhood Board, and currently serving on the boards of Ka Papa O Kakuhikewa, an organization that promotes natural resource conservation in the Kapolei and Wai'anae communities through various projects, and Hui Malama I Na Kupuna 'O Hawai'i Nei, an organization that is dedicated to ensuring the proper treatment of ancestral Native Hawaiians through, among other things, interment and reinterment services, and repatriation of ancestral remains and items of cultural patrimony. Due to his extensive knowledge of the ocean, Mr. Aila has served on various panels and groups advising the Western Pacific Regional Fishery Management Council, including the Pelagic Advisory Sub-panel, the Bottom Fish and Indigenous Rights Advisory Sub-panel, and Chairman of the Small Boat Pelagic Fisheries Working Group.

Ms. Walterbea Alderguer – Ms. Alderguer is a member of the Concerned Elders of Wai'anae. Her family is from Maili. Ms. Alderguer is interested and involved in issues relating to environmental justice in the Wai'anae area. She is also engaged in educating Hawaiian youth in the history and culture of their Wai'anae home and was involved in the restoration of Kaneaki Heiau in Makaha Valley.

Ms. Polly "Granny" Grace – Ms. Grace grew up in Kalihi and moved to Wai'anae about 50 years ago after a doctor recommended relocating to a drier climate due to her daughter's severe asthma. Because the land was so dry and barren, their lives focused on the ocean and beach. Income was supplemented with the plentiful seafood then available in the coastal waters of Wai'anae. Ms. Grace is a community activist, organizer and small-business women. She is involved in many community activities, such as helping the homeless. One of her first major community efforts in 1976 was to procure emergency medical services for Wai'anae, which has evolved into the Wai'anae Coast Comprehensive Health Center. Ms. Grace is also involved with the Queen Lili'uokalani Children's Center, whose mission is to help orphans and destitute children with preference given to children of Hawaiian ancestry.

Ms. Alice Kaholo Greenwood – Ms. Greenwood's family has lived in Wai'anae since 1913. She is currently one of the many working homeless that live in tents along the 13-miles of beaches on the Wai'anae coast. She is involved in issues concerning environmental justice and is a member of the Concerned Elders of Wai'anae and Nani O Wai'anae (a non-profit volunteer organization committed to creating a community-based program to address environmental issues). Ms. Greenwood has done extensive research in land titles and genealogy and currently serves on the O'ahu Island Burial Council.

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